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today was not written for publication and
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Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte EDWARD A. COVINGTON

Appeal No. 2002-0416
Application No. 08/902,625

ON BRIEF

Before PAK, LIEBERMAN, and PAWLIKOWSKI, Administrative Patent
Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 30-37.
As indicated on the top of page 2 of the brief, claims 1-3, 5-26,
28, and 29 have been allowed.

Claims 30 and 33 are representative of the subject matter on
appeal, and are set forth below, and **bolded** text is for emphasis:

30. A panel-type filter element for filtering transmission oil,
the filter element being adapted to be mounted on a peripheral surface
of a transmission oil pan spaced from the floor of the pan, the
peripheral surface having a selected shape with respect to the
direction in which a vehicle mounting the transmission oil pan
normally moves, the filter element being used to filter transmission
oil which flows in a selected horizontal direction in the oil pan
toward the sump, the filter element comprising:

a mounting frame corresponding in shape to the selected shape of
the peripheral surface of the sump so as to be adapted to be oriented
in a selected direction parallel to the direction in which the vehicle

normally moves when the frame is mounted on the peripheral surface, the frame defining an area of a selected shape therewithin;

a pleated filter media suitable for filtering transmission oil, the pleated filter media being mounted within the area defined by the mounting frame, the pleated filter media having pleats defined by peaks and valleys which join panels extending in a selected direction parallel to the selection [sic] direction of the frame, the valleys of the filter media all lying in the same plane **being positioned below** the mounting frame and the peaks rising to at least the bottom of the frame and all lying in the same plane with the panels having a dirty transmission oil side facing toward the mounting frame and a clean transmission oil side facing away from the mounting frame; wherein **when** the frame is mounted in the peripheral area of the sump, the peaks, valleys and panels of the filter media extend in a direction parallel to the direction in which the vehicle mounting the transmission oil pan moves.

33. A panel-type filter element for filtering lubricating oil, the filter element being adapted to be mounted on a peripheral surface of a lubricating oil [pan] spaced from the floor of the pan, the peripheral surface having a selected shape with respect to the direction in which a vehicle mounting the lubricating oil pan normally moves, the filter element being used to filter lubricating oil which flows in a selected horizontal direction in the oil pan toward the sump, the filter element comprising:

a mounting frame corresponding in shape to the selected shape of the peripheral surface of the sump so as to be adapted to be oriented in a selected direction parallel to the direction in which the vehicle normally moves when the frame is mounted on the peripheral surface, the frame defining an area of a selected shape therewithin;

a pleated filter media suitable for filtering lubricating oil, the pleated filter media being mounted within the area defined by the mounting frame, the pleated filter media having pleats defined by peaks and valleys which join panels extending in a selected direction parallel to the selection [sic] direction of the frame, the valleys of the filter media all lying in the same plane **being positioned below** the mounting frame and the peaks rising to at least the bottom of the frame and all lying in the same plane with the panels having a dirty lubricating oil side facing toward the mounting frame and a clean lubricating oil side facing away from the mounting frame; wherein **when** the frame is mounted in the peripheral area of the sump, the peaks, valleys and panels of the filter media extend in a direction parallel to the direction in which the vehicle mounting the lubricating oil pan moves.

The examiner relies upon the following references as evidence of unpatentability:

Thorman et al. (Thorman)	3,056,501	Oct. 2, 1962
Rogers	3,397,518	Aug. 20, 1968
Fujii et al. (Fujii)	JP 56-45643 ¹	Oct. 28, 1981
Knecht	DE 3822443 ¹	Mar. 23, 1989

Claims 33, 34, 35, and 37 stand rejection under 35 U.S.C. § 102(b) as being anticipated by Rodgers.

Claims 30, 31, 32, and 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Thorman.

Claims 33, 34, 35, and 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Rodgers.

Claims 30, 31, 32, and 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Knecht in view of Thorman.

Claims 33, 34, 35, and 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Knecht in view of Rodgers.

Claims 30, 31, 32, and 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rodgers in view of Thorman.

On page 5 of the brief, appellants group the claims into two groupings. Appellants group claims 30, 31, 32, and 36 together and group claims 33, 34, 35, and 37 together. On page 10 of the brief, appellants state that throughout the final rejection the examiner uses different references to reject different groups of claims. Appellants therefore argue that the final rejection itself establishes separate patentability for the grouping of claims. On pages 1-2 of the reply brief, appellants also argue

¹ The foreign references listed each have an English language translation provided by the USPTO Scientific and Technical Information Center (STIC) Library. We use these translations in this decision for these foreign references.

that page 10 of the brief indicates a statement for these separate groupings. We therefore consider claims 30 and 33. 37 CFR § 1.192(c)(7)(8)(2000). We note that on page 3 of the answer, the examiner states that appellants' brief does not include a statement that claims 30-37 stand or fall together. However, as indicated supra, appellants have grouped the claims into two groupings. We therefore reiterate that we consider claims 30 and 33 in this appeal.

OPINION

We have thoroughly reviewed appellants' brief and reply brief and the examiner's answer. In view of this review, we reverse each of the rejections.

I. Background of the Subject Matter on Appeal

Page 2 of appellants' specification indicates that one feature of appellants' invention is to provide a new and improved filter element wherein the filter element is configured for use in an oil pan useful in devices such as transmissions and internal combustion engines.

On page 2 of the brief, appellants' Summary of the Invention indicates that the allowed claims are directed to the assembly which positively recites both the filter and the oil pan structure. Claims 30 and 31, however, are directed to the filter element that is configured for use in the oil pan/filter assembly 10, as depicted in Figures 1-3 and 9-13 of appellants' specification.

Hence, claims 30 and 33 are directed to the filter element 14 shown in the Figures, see particularly Figure 9.

The preliminary amendment filed on May 7, 1999 (Paper No. 9), on page 3, indicates that independent claims 30 and 33 are specifically directed to oil pans which have a pleated filter

media wherein the pleated filter media has pleats which extend in the direction of vehicular motion. Appellants further states that consequently, the pleats provide baffles which prevent either the transmission oil or lubricating oil in the pan from sloshing laterally to one side or the other due to centrifugal force when the vehicle turns, thus creating a momentary situation in which either a vehicle's engine or its transmission might be starved for oil. This is an important feature of appellants' filter element.

II. The rejection of claims 33-35 and 37 under 35 U.S.C. § 102(b) as being anticipated by Rodgers

We consider claim 33 in this rejection.

On pages 7-8 of the brief, appellants state that Rodgers does not anticipate these claims because Rodgers does not disclose the preamble recitations of the claims as summarized on pages 6-7 of the brief. Appellants also state that Rodgers does not disclose the concept of a filter media being positioned below a mounting frame as required by claim 33. (brief, pages 7-8).

On page 4 of the answer, the examiner states that the limitations regarding the transmission pan and vehicle relate to an intended use and therefore carry no patentable weight.

It therefore appears that a critical issue to be resolved in this appeal is whether or not claim 33 (and claim 30, discussed later in this decision), requires (1) that the mounting frame be adapted to be oriented in a selected direction parallel to the direction in which the vehicle normally moves when the frame is mounted on the peripheral surface of the sump and (2) that the pleats, the valleys, and panels of the filter media extend in a direction parallel to the direction in which the vehicle mounting the transmission oil pan moves.

We determined that because the last 3 lines of claim 33 recite "wherein **when** the frame is mounted in the peripheral area of the sump . . ." [emphasis added], claim 33 does not require that the frame be mounted in the manner discussed above. Hence, in this context, we agree with the examiner that this aspect of the claim bears no patentable weight. That is, it is not a requirement of claim 33.

However, we do agree with appellants that Rodgers teaches to locate the filter media above mounting frame 21 rather than below mounting frame 21. See figure 5, for example, of Rodgers. Hence, the aspect of claim 33 that recites that "the valleys of the filter media all lying in the same plane being positioned **below** the mounting frame and the peaks rising to at least the bottom of the frame . . ." [emphasis added], is not met by the teachings of Rodgers.

Hence, we reverse the rejection of claims 33-35 and 37 under 35 U.S.C. § 102(b) as being anticipated by Rodgers.

III. The rejection of claims 30-32, and 36 under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Thorman

We consider claim 30 in this rejection.

On pages 8-9 of the brief, appellants again argue that the recitations to the pan and vehicle cannot be ignored in claim 30, and therefore this rejection cannot be sustained. Appellants also state that Fujii discloses a filter media extending upwardly so that if the holes 9 of Fujii's filter media are used for the coupling the filter to another element, the coupling is accomplished for a different orientation. Appellants also argue that the filter of Fujii is directed to an air filter rather than a transmission oil filter. Appellants also argue that Thorman discloses a ring-type filter media in which the fluid flows

through the filter media horizontally in a radial direction rather than vertically, and that there is no disclosure in Thorman of the valleys of the filter media being positioned below a mounting frame.

Our determinations regarding the orientation of the mounting frame/filter element, as discussed supra, also apply here. That is, claim 30 does not require that the frame be mounted in the manner argued by appellants for the reasons discussed earlier in this decision.

However, we agree with appellants that Fujii in view of Thorman do not teach that "the valleys of the filter media all lying in the same plane being positioned **below** the mounting frame and the peaks rising to at least the bottom of the frame" [emphasis added]. On page 13 of the answer, the examiner asserts that Fujii teaches filter media having valleys "able/capable of operation below frame 6,7". However, as depicted in Figure 6 of Fujii, the filter media is not positioned below the mounting frame.

Therefore, we reverse the rejection of claims 30, 31, 32 and 36 under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Thorman.

IV. The rejection of claims 33-35 and 37 under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Rodgers

We consider claim 33 in this rejection.

On pages 8-9 of the brief, appellants argue that the recitations to the pan and vehicle found in independent claim 33 is not taught by Fujii in view of Rodgers. Appellants also state that Fujii has a filter media extending upwardly so that if the holes 9 of Fujii's filter media are used for coupling the filter to another element, the coupling is accomplished for a different

orientation. Appellants also argue that Fujii is directed to an air filter rather than a transmission oil filter.

For the reasons already discussed in this decision, the orientation of the mounting frame/filter element is not a requirement of claim 33, and therefore appellants' arguments in connection with this issue are unconvincing.

However, we agree with appellants that Fujii in view of Rodgers do not teach that "the valleys of the filter media all lying in the same plane being positioned **below** the mounting frame and the peaks rising to at least the bottom of the frame" [emphasis added]. As depicted in Figure 6 of Fujii, the filter media is not positioned below the mounting frame.

Therefore, we reverse the rejection of claims 33-35 and 37 under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Rodgers.

V. The rejection of claims 30-32 and 36 under 35 U.S.C. § 103 as being unpatentable over Knecht in view of Thorman

We consider claim 30 in this rejection.

On pages 9-10 of the brief, appellants argue that the rejection ignores limitations to the transmission pan and vehicle. Appellants also state that Knecht does not disclose peaks and valleys all in the same plane since the peaks and valleys are in numerous planes as shown in Figure 2 of Knecht. Appellants argue that Rodgers teaches that the filter media should be above the frame, thus teaching away from the claimed concept of positioning the valleys below the frame.

For the reasons already discussed in this decision, the orientation of the mounting frame/filter element is not a requirement of claim 30, and therefore appellants' arguments in connection with this issue are unconvincing.

With regard to whether Knecht teaches "pleated filter media having pleats defined by peaks and valleys which join panels extending in a selected direction parallel to the selection [sic] direction of the frame, the valleys of the filter media all lying in the same plane being positioned below the mounting frame and the peaks rising to at least the bottom of the frame and all lying in the same plane" [emphasis added], the examiner argues that Knecht does disclose this aspect of the claimed invention as items 2 and 5 in Figure 2 of Knecht. (answer, page 15).

We find that Figure 2 of Knecht shows pleated folds 1 in the form of zig-zag folds 2 that are positioned below mounting frame 3. Pleated folds 1 have peaks and valleys. Zig-zag folds 2 have peaks and valleys. The peaks and valleys of pleated folds 1 are not in the same plane as the peaks and valleys of zig-zag folds 2. Hence, we agree with appellants' position on this issue made on page 9 of the brief. The rejection does not recognize this difference and does not address why modification of this difference, to arrive at appellants' claimed invention, would have been obvious.

Furthermore, we note that the examiner acknowledges that Knecht does not indicate if the filtering material is suitable for filtering transmission oil. The examiner relies upon Thorman for teaching that paper is a suitable material for filtering transmission oil, and therefore it would have been obvious to modify Knecht's filter by using paper as the filtering material for filtering transmission oil. (answer, page 5). Yet, Knecht's disclosure is silent as to (1) what kind of medium is filtered and (2) what type of filter material is used in the filter device. The rejection does not fully address all of these deficiencies of Knecht.

In view of the above, we reverse the rejection of claims 30-32 and 36 under 35 U.S.C. § 103 as being unpatentable over Knecht in view of Thorman.

VI. The rejection of claims 30-35 and 36 under 35 U.S.C. § 103 as being unpatentable over Knecht in view of Rodgers

We consider claims 30 and 33 in this rejection.

We refer to our comments in Section V, above, and make the same determinations, for claims 30 and 33 in this rejection (reversal).

Our comments made in Section V regarding Thorman equally apply to Rodgers. We note that Rodgers discusses a filter material useable in an air filter device or in an oil filter device (column 1, lines 28-30). However, as stated in Section V, the examiner has not addressed the aforementioned deficiencies of Knecht, e.g., does not explain how Rodgers make obvious the modification of all of the differences of Knecht to arrive at appellants' claimed invention.

VII. The rejection of claims 30-32 and 36 under 35 U.S.C. § 103 as being unpatentable over Rodgers in view of Thorman

We consider claim 30 in this rejection.

On page 10 of the brief, appellants again submit that the rejection is erroneous because it ignores the limitations to the transmission pan and vehicle. On page 9 of the answer, the examiner again takes the position that with regard to claims 30 and 31 the limitations to the transmission pan and vehicle relate to intended use and therefore carry no patentable weight.

For the reasons already discussed in this decision, the orientation of the mounting frame/filter element is not a requirement of claim 30.

However, we agree with appellants that Fujii in view of Rodgers do not teach that "the valleys of the filter media all lying in the same plane being positioned **below** the mounting frame and the peaks rising to at least the bottom of the frame" [emphasis added].

Therefore, we reverse the rejection of claims 33-35 and 37 under 35 U.S.C. § 103 as being unpatentable over Fujii in view of Rodgers.

VII. Conclusion

Each of the rejections is reversed.

REVERSED

Chung K. Pak)	
Administrative Patent Judge)	
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Paul Lieberman)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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)	
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